

1 Choose the correct answer:

- a If the sum of two numbers equals 105 and the ratio between them is 2 : 3, then the largest number is

• 84 • 63 • 42 • 21

- b If $a : b = 2 : 3$, $b : c = 3 : 5$, then $a : c = \dots : \dots$

• 8 : 15 • 2 : 5 • 4 : 9 • 3 : 10

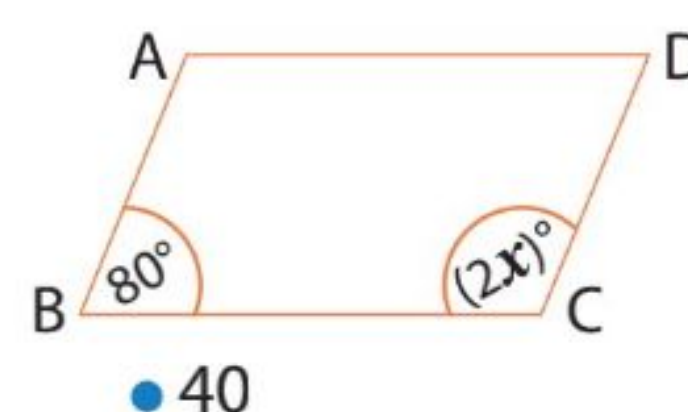
- c $0.001 \text{ dm}^3 = \dots \text{ cm}^3$.

• 0.01 • 0.1 • 1 • 10

- d In the opposite figure:

ABCD is a parallelogram, then $x = \dots^\circ$.

• 100 • 80 • 50



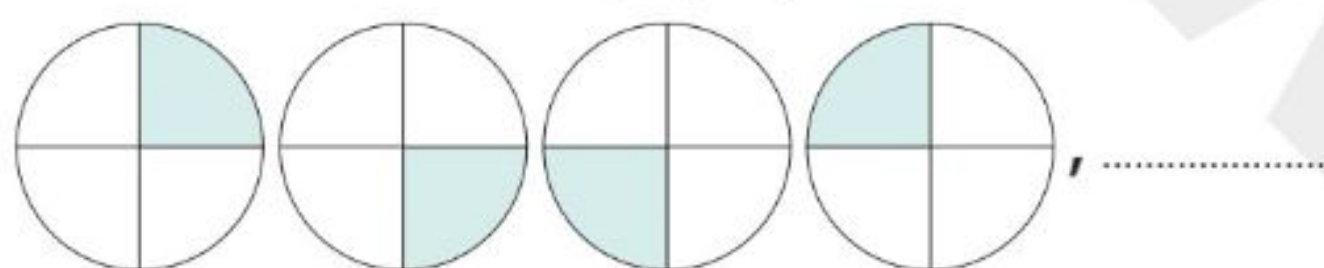
2 Complete each of the following:

- a $3000 \text{ gm} : 5 \text{ kg} = \dots$

- b The volume of a cuboid is 300 cm^3 and its base area is 25 cm^2 , then its height = cm

- c If the ratio between the number of girls and the number of boys in a school is 3 : 7 and the difference between their numbers is 80 pupils, then the number of girls is

- d Draw the next pattern



3 Solve the problem :

A box in the shape of a cuboid, of internal dimensions 21 cm, 18 cm and 6 cm, is wanted to be filled with pieces of chocolate, each of them is a cuboid of dimensions 3 cm, 3 cm and 1 cm. Find the number of pieces.

.....
.....

2 Choose the correct answer:

a 8 hours : $3\frac{1}{3}$ days = :

• 8 : 3

• 1 : 10

• 3 : 8

• 10 : 1

b The number of pupils in a primary school is 360 pupils if the ratio between the number of boys and the number of girls is 1 : 2, then the number of boys =

• 240

• 160

• 120

• 100

c A cuboid with dimensions 4 cm, 3 cm and 5 cm, then its volume = cm^3

• 10

• 25

• 60

• 50

d The diagonals are perpendicular in the

• rectangle

• square

• trapezium

• parallelogram

2 Complete each of the following:

a 25 seconds : $\frac{1}{3}$ minute =

b The ratio between the measures of the angles in a triangle is 2 : 3 : 4, then the measure of the greatest angle is

c The volume of a cuboid = the area of its

d If the capacity of a cuboid-shaped tank is 45 000 litres and its height is 5 m, then the area of its base = m^2

3 Solve the problem:

A square whose side length is 4 cm and a rectangle whose dimensions are 6 cm and 3 cm, find:

a The ratio between the perimeter of the square and the perimeter of the rectangle.



.....

.....

.....

.....

b The ratio between the area of the square and the area of the rectangle:

.....

.....

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.....



WWW
Gem

1 Choose the correct answer:

- a The ratio between $3\frac{1}{5}$ and 9.6 =
- 3 : 1 • 1 : 6 • 5 : 3 • 1 : 3
- b If the ratio between two numbers is 7 : 2 and their sum is 27, then the difference between the two numbers is
- 27 • 15 • 21 • 6
- c The volume of a cuboid is 160 cm^3 and its base is square with side length 4 cm, then its height = cm.
- 42 • 8.5 • 10 • 4.5
- d The parallelogram whose sides are equal in length is called
- square • rectangle • rhombus • trapezium

2 Complete each of the following:

- a 12 kirats : 1.25 feddans = (in simplest form)
- b The two diagonals are equal in length in each of and
- c If the volume of a cuboid is 64 cm^3 and the area of its base is 16 cm^2 , then its height = cm
- d If the ratio between the measures of the angles of a triangle is 2 : 3 : 4, then the measure of each angle of the triangle is°,° and°

3 Solve the problem:

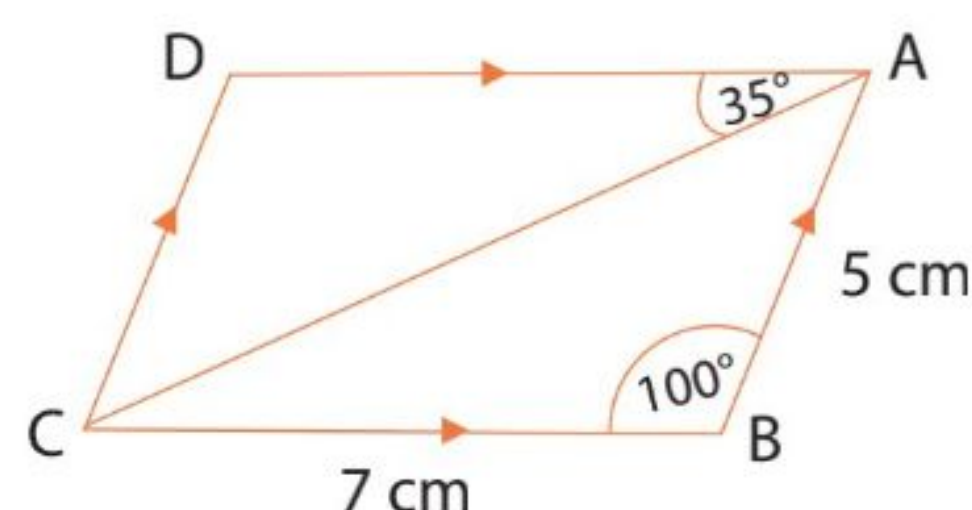
The opposite figure shows a parallelogram in which:

$m(\angle B) = 100^\circ$, $m(\angle DAC) = 35^\circ$ $AB = 5 \text{ cm}$ and $BC = 7 \text{ cm}$.

(Without using geometrical instruments)

Find:

- a $m(\angle D) = \dots\dots\dots$
- b $m(\angle ACD) = \dots\dots\dots$
- c The perimeter of the parallelogram ABCD =



1 Choose the correct answer:

- a If the sum of two numbers equals 105 and the ratio between them is 2 : 3, then the largest number is

• 84 • **63** • 42 • 21

- b If $a : b = 2 : 3$, $b : c = 3 : 5$, then $a : c = \dots : \dots$

• 8 : 15 • **2 : 5** • 4 : 9 • 3 : 10

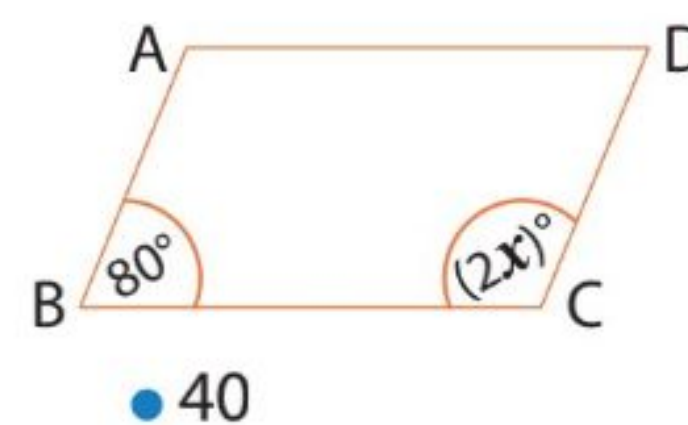
- c $0.001 \text{ dm}^3 = \dots \text{ cm}^3$.

• 0.01 • 0.1 • **1** • 10

- d In the opposite figure:

ABCD is a parallelogram, then $x = \dots^\circ$.

• 100 • 80 • **50** • 40



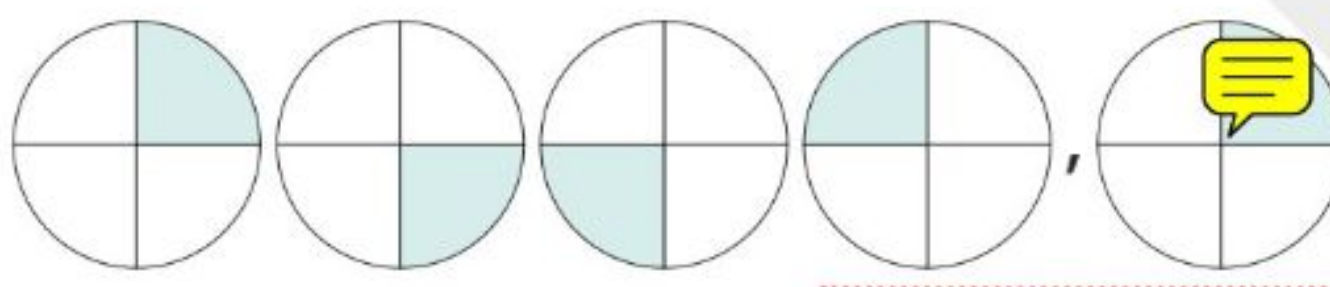
2 Complete each of the following:

- a $3000 \text{ gm} : 5 \text{ kg} = \underline{3 : 5}$.

- b The volume of a cuboid is 300 cm^3 and its base area is 25 cm^2 , then its height = 12 cm.

- c If the ratio between the number of girls and the number of boys in a school is 3 : 7 and the difference between their numbers is 80 pupils, then the number of girls is 60.

- d Draw the next pattern



3 Solve the problem :

A box in the shape of a cuboid, of internal dimensions 21 cm, 18 cm and 6 cm, is wanted to be filled with pieces of chocolate, each of them is a cuboid of dimensions 3 cm, 3 cm and 1 cm. Find the number of pieces.

$$\text{the number of pieces} = \frac{21 \times 18 \times 6}{3 \times 3 \times 1} = 252 \text{ pieces}$$

2 Choose the correct answer:

a 8 hours : $3\frac{1}{3}$ days = :

• 8 : 3

• **1 : 10**

• 3 : 8

• 10 : 1

b The number of pupils in a primary school is 360 pupils if the ratio between the number of boys and the number of girls is 1 : 2, then the number of boys = ~~pupils~~.

• 240

• 160

• **120**

• 100

c A cuboid with dimensions 4 cm, 3 cm and 5 cm, then its volume = cm^3

• 10

• 25

• **60**

• 50

d The diagonals are perpendicular in the

• rectangle

• **square**

• trapezium

• parallelogram

2 Complete each of the following:

a 25 seconds : $\frac{1}{3}$ minute = **5 : 4**b The ratio between the measures of the angles in a triangle is 2 : 3 : 4, then the measure of the greatest angle is **80°** c The volume of a cuboid = the area of its **base \times height**.d If the capacity of a cuboid-shaped tank is 45 000 litres and its height is 5 m, then the area of its base = **9 m^2** .

3 Solve the problem:

A square whose side length is 4 cm and a rectangle whose dimensions are 6 cm and 3 cm, find:

a The ratio between the perimeter of the square and the perimeter of the rectangle.

**The perimeter of the square = side length \times 4****The perimeter of the square = $4 \times 4 = 16 \text{ cm}$** **The perimeter of the rectangle = (Length + Width) \times 2****The perimeter of the rectangle = $(3 + 6) \times 2 = 18 \text{ cm}$** **Perimeter of the square : perimeter of the rectangle** **$16 : 18 \div 2 = 8 : 9$**

- b The ratio between the area of the square and the area of the rectangle:

The area of the square = side length x itself

The area of the square = $4 \times 4 = 16 \text{ cm}^2$

The area of the rectangle = Length x Width

The area of the rectangle = $3 \times 6 = 18 \text{ cm}^2$

Area of the square : Area of the rectangle

$16 : 18..(\div 2) = 8:9$

1 Choose the correct answer:

- a The ratio between $3\frac{1}{5}$ and $9.6 = \dots\dots\dots$
- 3 : 1 • 1 : 6 • 5 : 3 • **1 : 3**
- b If the ratio between two numbers is 7 : 2 and their sum is 27, then the difference between the two numbers is $\dots\dots\dots$
- 27 • **15** • 21 • 6
- c The volume of a cuboid is 160 cm^3 and its base is square with side length 4 cm, then its height = $\dots\dots\dots$ cm.
- 42 • 8.5 • **10** • 4.5
- d The parallelogram whose sides are equal in length is called $\dots\dots\dots$
- square • rectangle • **rhombus** • trapezium

2 Complete each of the following:

- a 12 kirats : 1.25 feddans = **2 : 5** (in simplest form)
- b The two diagonals are equal in length in each of **the square and the rectangle**.
- c If the volume of a cuboid is 64 cm^3 and the area of its base is 16 cm^2 , then its height = **4 cm**.
- d If the ratio between the measures of the angles of a triangle is 2 : 3 : 4, then the measure of each angle of the triangle is **$40^\circ, 60^\circ, 80^\circ$** .

3 Solve the problem:

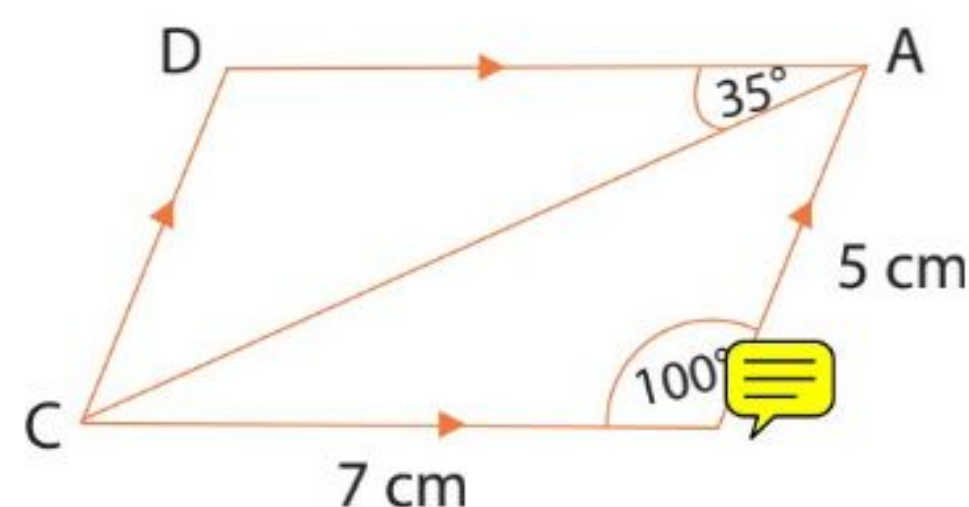
The opposite figure shows a parallelogram in which:

$m(\angle B) = 100^\circ$, $m(\angle DAC) = 35^\circ$ AB = 5 cm and BC = 7 cm.

(Without using geometrical instruments)

Find:

- a $m(\angle D) = \textbf{100}^\circ$
- b $m(\angle ACD) = \textbf{45}^\circ$
- c The perimeter of the parallelogram ABCD = **24 cm**.



Test

1

Total mark

10

1 Choose the correct answer from those given :

(4 marks)

- 1 The ratio between the two numbers 15 and 21 is
 (a) 3 : 7 (b) 5 : 3 (c) 5 : 7 (d) 3 : 7
- 2 5000 gm : 2.5 kg. =
 (a) 1 : 2 (b) 5 : 2 (c) 2 : 1 (d) 2 : 5
- 3 The diagonals are perpendicular in
 (a) rectangle. (b) square.
 (c) parallelogram. (d) trapezoid.
- 4 $10 \text{ dm}^3 = \dots\dots\dots \text{cm}^3$
 (a) 1000 (b) 100 (c) 10000 (d) 10

2 Complete :

(4 marks)

- 1 If $A : B = 3 : 4$ and $B : C = 2 : 5$, then $A : C = \dots\dots\dots$ (in the simplest form)
- 2 ABCD is a rhombus , $m(\angle A) = 60^\circ$, then $m(\angle B) = \dots\dots\dots$
- 3 $\frac{0.5}{6} = 1 : \dots\dots\dots$
- 4 A cuboid of dimensions 8 cm. , 6 cm. and 5 cm.
 , then its volume = $\dots\dots\dots \text{cm}^3$

3 If the number of students in a school is 420 students and the ratio between the number of boys to the number of girls is 3 : 4 , find the number of each of boys and girls.

(2 marks)

.....

.....

.....

.....

Test

2

Total mark

10

1 Choose the correct answer from those given :

(4 marks)

1 $\frac{5}{3} : \frac{3}{8} = \dots\dots\dots$

(a) 5 : 8

(b) 5 : 9

(c) 40 : 8

(d) 40 : 9

2 $\frac{1}{2}$ day : 8 hours : $\frac{1}{4}$ day = $\dots\dots\dots$

(a) 6 : 4 : 3

(b) 8 : 4 : 3

(c) 12 : 8 : 4

(d) 2 : 3 : 4

3 The four sides are equal in length in $\dots\dots\dots$

(a) trapezoid.

(b) parallelogram.

(c) rhombus.

(d) rectangle.

4 A cuboid of volume 300 cm^3 and base area 50 cm^2 , then its height = $\dots\dots\dots$ cm.

(a) 6

(b) 12

(c) 8

(d) 10

2 Complete :

(4 marks)

1 $\triangle \triangle \bigcirc \triangle \triangle \bigcirc \triangle \triangle \bigcirc \dots\dots\dots$ (in the same pattern)

2 $\frac{1}{4} : \frac{1}{3} : \frac{1}{2} = \dots\dots\dots : \dots\dots\dots : \dots\dots\dots$ (in the simplest form)

3 $\frac{1}{2} \text{ km} : 250 \text{ m.} = \dots\dots\dots : \dots\dots\dots$ (in the simplest form)

4 The parallelogram in which its two diagonals are equal in length is called $\dots\dots\dots$

3 A metallic cuboid of dimensions 16 cm. , 8 cm. , 12 cm. is converted into ingots in the shape of cuboid of dimensions 4 cm. , 2 cm. , 3 cm.

Find the number of ingots.

(2 marks)

.....

.....

.....

Test

3

Total mark

10

1 Choose the correct answer from those given :

(4 marks)

1 The quadrilateral in which only two sides are parallel is called

- (a) rectangle. (b) square. (c) rhombus. (d) trapezium.

2 $6000 \text{ gm} : 8 \text{ kg} = \dots\dots\dots$

- (a) $3 : 4$ (b) $4 : 3$ (c) $7 : 4$ (d) $3 : 7$

3 A cuboid of base area 18 cm^2 and height 4 cm . , then its volume =

- (a) 72 cm^2 (b) 72 cm^3 (c) 144 cm^2 (d) 144 cm^3

4 $8 \text{ dm} . : 120 \text{ cm} . : 2 \text{ m} . = \dots\dots\dots$

- (a) $8 : 2 : 5$ (b) $2 : 3 : 5$ (c) $2 : 6 : 5$ (d) $2 : 3 : 10$

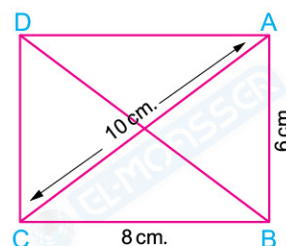
2 Complete :

(4 marks)

1 In the opposite figure :

ABCD is a rectangle

, then $BD = \dots\dots\dots \text{ cm}$.



2 $\frac{1}{3} : \frac{1}{5} : \frac{1}{6} = \dots\dots\dots : \dots\dots\dots : \dots\dots\dots$

(in the simplest form)

3 A cuboid with a square shaped base of side length 9 cm . and height 5 cm .

, then its volume = $\dots\dots\dots \text{ cm}^3$

4 XYZL is a parallelogram , $m(\angle Y) = 80^\circ$, then $m(\angle L) = \dots\dots\dots$

3 If the ratio between the side lengths of a triangle is $3 : 5 : 6$ and its perimeter is 42 cm . Find the length of each side.

(2 marks)

.....

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.....

.....

Answers of Mathematics

Answers of Test

1

1 1 c

2 c

3 b

4 c

2 1 3 : 10

2 120°

3 12

4 240

3 Boys : Girls : Sum

3 : 4 : 7

? : ? : 420

The number of boys = $\frac{3 \times 420}{7} = 180$ boys

The number of girls = $\frac{4 \times 420}{7} = 240$ girls

Answers of Test

2

1 1 d

2 a

3 c

4 a

2 1 

2 3 : 4 : 6

3 2 : 1

4 rectangle

3 The volume of the metallic cuboid = $16 \times 8 \times 12 = 1536 \text{ cm}^3$

The volume of each ingot = $4 \times 2 \times 3 = 24 \text{ cm}^3$

The number of ingots = $1536 \div 24 = 64$ ingots

Answers of Test

3

1 1 d

2 a

3 b

4 b

2 1 10

2 10 : 6 : 5

3 405

4 80°

3 1st side : 2nd side : 3rd side : Sum

3 : 5 : 6 : 14

? : ? : ? : 42

The length of the 1st side = $\frac{3 \times 42}{14} = 9 \text{ cm}$.

The length of the 2nd side = $\frac{5 \times 42}{14} = 15 \text{ cm}$.

The length of the 3rd side = $\frac{6 \times 42}{14} = 18 \text{ cm}$.

Revision

Complete:

1) The ratio between the perimeter of a rhombus and its side Length = :.....

.....
.....

2) 2 Kirats : 18 Sahms

.....
.....

3) If $a : b = 2:3$ and $b:c = 6:7$ then $a:c =$:

.....
.....

4) In the parallelogram, the sum of measures of the two consecutive angles =

5) $\frac{1}{5} : \frac{3}{4} : \frac{1}{2}$

.....
.....

6) 0.6 Km : 250 m.

.....
.....

Choose the correct answer:

1) 800 gm. : 1.6 kg. = : (1 : 2 or 2 : 1 or 5 : 1 or 1 : 20)

2) The two diagonals are perpendicular and equal in length in

(rectangle , square , parallelogram , rhombus)

3) The parallelogram in which two adjacent sides are equal in length is called.....

(square , rectangle , trapezium, rhombus)

4) The two diagonals are perpendicular and equal in length in the

(rectangle or square or parallelogram or rhombus)

5) The ratio between the ages of two pupils is 3 : 4 and the difference

6) between their ages is 3 years then the age of the older is years.

(3 or 9 or 4 or 12)

7) The ratio among the measure of angle of the triangle 1 : 2 : 3 , then the measure of the smallest angle equal

.....

(10 ° or 30 ° or 45 ° or 60 °)

8) The ratio between three numbers is 3 : 4 : 7 and their sum is 70 then the greatest one is

(15 or 35 or 20 or 14)

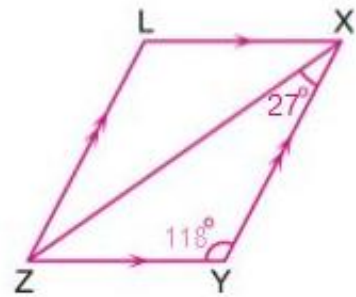
1) In the opposite figure :

XYZL is a parallelogram in which

$m(\angle Y) = 118^\circ$ and $m(\angle YXZ) = 27^\circ$

Find : (1) $m(\angle L)$

(2) $m(\angle LXZ)$

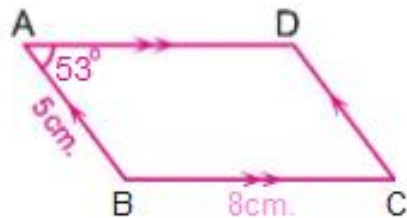


2) In the opposite figure :

ABCD is a parallelogram in which $m(\angle A) = 53^\circ$

BC = 8 cm. and AB = 5 cm. Find :

a) $m(\angle D)$



3) The length of rectangle whose its area equals 24 cm^2 is 6cm then the ratio between its perimeter and its length equals

.....
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.....

4) The number of pupils in a primary school is 720 pupils if the ratio between the number of boys and the number of girls is 5 : 4 . Find the number of boys and the number of girls.

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.....

5) If the ratio among the measures of a triangle 2 : 3 : 4 then the measure of its angles in the same order are

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.....

6) If the ratio between the measure of the two acute angles in the right angled triangle is 7 : 11 . Find the measure of each angle .

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.....

7) The ratio between the production of the three factories is 9 : 7 : 11 and the production of the third factory exceeds the first one by one thousand Tons . Find the production of each factory

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.....

8) The ratio between the length of a rectangle to its width equals 7 : 4, its perimeter is 44 meters . find the length and the width of the rectangle and calculate its area .

.....
.....
.....

Revision

Complete:

1) The ratio between the perimeter of a rhombus and its side Length = 4 : 1

2) 2 Kirats : 18 Sahms

$$\begin{aligned} & \boxed{\times 24} \\ & 18 : 18 \quad (\div 6) \\ & \boxed{3 : 3} \end{aligned}$$

3) If $a : b = 2 : 3$ and $b : c = 6 : 7$ then $a : c =$ 4 : 7

$$\begin{aligned} a : b : c \\ 2 : 3 : 6 : 7 \end{aligned}$$

4) In the parallelogram, the sum of measures of the two consecutive angles = 180°

5) $\frac{1}{5} : \frac{3}{4} : \frac{1}{2}$

$$\ast 5 \times 4 \times 2 = 40 \quad \ast \frac{1}{5} \times 40 = 8 \quad \ast \frac{3}{4} \times 40 = 30 \quad \ast \frac{1}{2} \times 40 = 20$$

$$\begin{aligned} & 8 : 30 : 20 \quad (\div 2) \\ & 4 : 15 : 10 \end{aligned}$$

6) 0.6 Km : 250 m.

$$\begin{aligned} & \boxed{\times 1000} \\ & 600 : 250 \quad (\div 50) \\ & \boxed{12 : 5} \end{aligned}$$

Choose the correct answer:

1) 800 gm. : 1.6 kg. = 1 : 2 ($\times 1000$) ($\div 800$) (1 : 2 or 2 : 1 or 5 : 1 or 1 : 20)

2) The two diagonals are perpendicular and equal in length in Square

(rectangle , square , parallelogram , rhombus)

3) The parallelogram in which two adjacent sides are equal in length is called rhombus

(square , rectangle , trapezium , rhombus)

4) The two diagonals are perpendicular and equal in length in the Square

(rectangle or square or parallelogram or rhombus)

1st : 2nd : Diff
3 : 4 : 1
: ? : 3

5) The ratio between the ages of two pupils is 3 : 4 and the difference

6) between their ages is 3 years then the age of the older is years.

older pupils age = $\frac{4 \times 3}{1} = 12$ years old (3 or 9 or 4 or 12)

7) The ratio among the measure of angle of the triangle 1 : 2 : 3, then the measure of the smallest angle equal

1st : 2nd : 3rd : Sum
1 : 2 : 3 : 6
Smallest angle = $\frac{1 \times 180}{6} = 30^\circ$
? : : : 180
(10° or 30° or 45° or 60°)

8) The ratio between three numbers is 3 : 4 : 7 and their sum is 70 then the greatest one is

1st : 2nd : 3rd : Sum
3 : 4 : 7 : 14
: : ? : 70
greatest angle = $\frac{7 \times 70}{14} = 35^\circ$
(15 or 35 or 20 or 14)

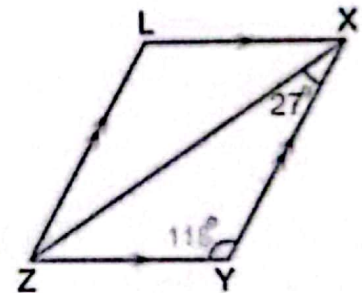
1) In the opposite figure :

XYZL is a parallelogram in which

$m(\angle Y) = 118^\circ$ and $m(\angle YXZ) = 27^\circ$

Find : (1) $m(\angle L)$ 118° "opposite"

(2) $m(\angle LXZ)$ $180 - (118 + 27) = 35^\circ$ "consecutive"

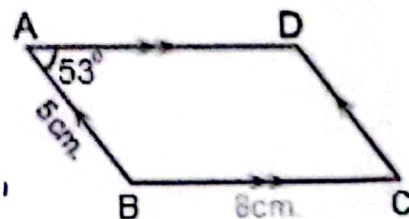


2) In the opposite figure :

ABCD is a parallelogram in which $m(\angle A) = 53^\circ$

BC = 8 cm. and AB = 5 cm. Find :

a) $m(\angle D) = 180 - 53 = 127^\circ$ "consecutive"



3) The length of rectangle whose its area equals 24 cm^2 is 6cm then the ratio between its perimeter and its length equals

* $W = \frac{A}{L} = \frac{24}{6} = 4 \text{ cm}$ * $P = (L + W) \times 2$
= $(6 + 4) \times 2 = 20 \text{ cm}$
* $P : L$
 $20 : 6$ ($\div 2$)
 $10 : 3$

4) The number of pupils in a primary school is 720 pupils if the ratio between the number of boys and the number of girls is 5 : 4 . Find the number of boys and the number of girls.

$$\begin{array}{lcl} \text{Boys : girls : Sum} & & \text{No. of boys} = \frac{5 \times 720}{9} = 400 \\ 5 : 4 : 9 & & \\ & & \text{No. of girls} = \frac{4 \times 720}{9} = 320 \end{array}$$

5) If the ratio among the measures of a triangle 2 : 3 : 4 then the measure of its angles in the same order are

$$\begin{array}{lcl} 1^{\text{st}} : 2^{\text{nd}} : 3^{\text{rd}} : \text{Sum} & & 1^{\text{st}} \text{ angle} = \frac{2 \times 180}{9} = 40^\circ \\ 2 : 3 : 4 : 9 & & 2^{\text{nd}} \text{ angle} = \frac{3 \times 180}{9} = 60^\circ \\ : : : 180^\circ & & 3^{\text{rd}} \text{ angle} = \frac{4 \times 180}{9} = 80^\circ \end{array}$$

6) If the ratio between the measure of the two acute angles in the right angled triangle is 7 : 11 . Find the measure of each angle .

$$\begin{array}{lcl} 1^{\text{st}} \text{ angle} : 2^{\text{nd}} \text{ angle} : \text{Sum} & & 1^{\text{st}} \text{ angle} = \frac{7 \times 90}{18} = 35^\circ \\ 7 : 11 : 18 & & 2^{\text{nd}} \text{ angle} = \frac{11 \times 90}{18} = 55^\circ \\ : : : 90^\circ & & \end{array}$$

7) The ratio between the production of the three factories is 9 : 7 : 11 and the production of the third factory is exceeds the first one by one thousand Tons . Find the production of each factory

$$\begin{array}{lcl} 1^{\text{st}} : 2^{\text{nd}} : 3^{\text{rd}} : \text{Diff} & & 1^{\text{st}} \text{ Factory} = \frac{9 \times 1000}{2} = 4500 \text{ tons} \\ 9 : 7 : 11 : 2 & & 2^{\text{nd}} \text{ Factory} = \frac{7 \times 1000}{2} = 3500 \text{ tons} \\ : : : 1000 & & 3^{\text{rd}} \text{ Factory} = \frac{11 \times 1000}{2} = 5500 \text{ tons} \end{array}$$

8) The ratio between the length of a rectangle to its width equals 7 : 4, its perimeter is 44 meters . find the length and the width of the rectangle and calculate its area .

$$\begin{array}{lcl} L : W : \text{Sum} & & L = \frac{7 \times 44}{22} = 14 \text{ cm} \quad W = \frac{4 \times 44}{22} = 8 \text{ cm} \\ 7 : 4 : 22 & & A = L \times W = 14 \times 8 = 112 \text{ cm}^2 \\ : : : 44 & & \end{array}$$

Exam (1)

1	6 hours : 1 day = (1 : 10 , 1 : 4 , 6 : 1 , 4 : 1)
2	If $a : b = 2 : 5$ and $b : c = 5 : 7$, then $a : c =$ (5 : 2 , 2 : 7 , 7 : 5 , 7 : 2)
3	If one angle of parallelogram is right then its called a (rectangle , square , rhombus , cube)
4	The sum of measures of any two consecutive angles in a parallelogram =° (90 , 180 , 270 , 360)
5	The ratio between three numbers is 3 : 4 : 7 and heir sum is 70 , then the greatest number =
6	if the volume of a cuboid is 27 cm^3 and the area of its base is 9 cm^2 , then its height iscm
7	$0.32 : 6.4 : 8 =$ (in the simplest form)
8	If the diagonals of a parallelogram are equal then it is
9	If the ratio between the measures of two acute angles in a right angled triangle is 7 : 11 Find the measure of each of them

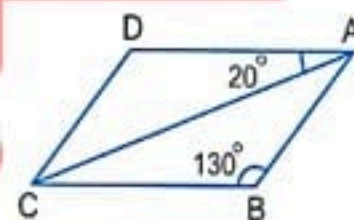
Exam (2)

- 1 The diagonals are perpendicular and have the same length in the (square , rectangle , trapezium , parallelogram)
- 2 $\frac{1}{2}$ hour : 36 minutes = (2 : 3 , 1 : 3 , 5 : 6 , 1 : 8)
- 3 the number of trapezoids is
(2 , 3 , 4 , 5)
- 4 ABCD is a square , then the ratio between AB : CD =
(1 : 1 , 1 : 2 , 1 : 3 , 2 : 1)
- 5 The ratio between the two numbers 2.4 and 3.6 =
- 6 The ratio between two numbers = $\frac{\text{.....}}{\text{.....}}$
- 7 All angles are right and two diagonals are perpendicular in
- 8 The cuboid has faces , edges and Vertices
- 9 Find the area of the rectangle whose the perimeter is 30 cm and the ratio between its dimensions is 3 : 2



Exam (3)

- 1 The centimeter cube is a unit of measuring the
(length , area , volume , weight)
- 2 $\frac{2}{3} : 3\frac{1}{3} = \dots\dots\dots$ (1 : 5 , 1 : 2 , 2 : 5 , 1 : 10)
- 3 the ratio between the circumference of the circle and its diameter length =
($\frac{\pi}{2}$, π , $\frac{1}{\pi}$, 2π)
- 4 ABCD is a parallelogram , then $m(\angle BAC) = \dots\dots\dots$
(50° , 20° , 30° , 120°)
- 5 If $a : b = 5 : 6$ and $a + b = 33$ then $a = \dots\dots\dots$
- 6 The simplest form of the ratios $12 : 18 : 36 = \dots\dots\dots$
- 7 A B C D is a parallelogram , the ratio between $\angle A : \angle C = \dots\dots\dots$
- 8 If the volume of a cuboid is 27 cm^3 and its height is 3 cm., then the area of its base = cm^2
- 9 A triangular piece of land the ratio between lengths of its sides 4 : 6 : 7 , if the perimeter of this piece of land is 51 meters find the lengths of sides of piece of land



Exam (4)

1	if $A : B = 2 : 3$, $B : C = 4 : 5$, then $A : C = \dots\dots\dots$ (8 : 15 , 15 : 8 , 2 : 5 , 3 : 5)
2	The line segment resulted from intersection of two faces is called (vertex , edge , diagonal , face)
3	the parallelogram in which diagonals are perpendicular is called (rectangle , square , rhombus , trapezium)
4	The ratio $\frac{3}{4} : \frac{5}{6} = \dots\dots\dots$ (3 : 5 , 9 : 10 , 4 : 5 , 1 : 2)
5	As comparing between two similar quantities or numbers and of the same unit , then the resultant fraction is called
6	3 weeks : 24 days = : (in the simplest form)
7	A cuboid is of dimensions 8 cm., 6 cm. and 10 cm., then its volume is
8	In parallelogram ABCD , $m(\angle A) + m(\angle C) = 140^\circ$, then $m(\angle B) = \dots\dots\dots$
9	A sum of money is divided between two persons in the ratio 3 : 5 if the share of the second exceeds the share of the first by L.E 30 Find the share of the first


Exam (5)

1	<p>The ratio between 9 months and 3 years is</p> <p>(9 : 3 , 3 : 9 , 1 : 4 , 4 : 1)</p>
2	<p>The base of a cuboid is a square ,its volume is 2 000 cm³.And its height is 5 cm.,then the side length of its base is cm</p> <p>(100 , 20 , 10 , 50)</p>
3	<p>The two diagonals are perpendicular and equal in length in the</p> <p>(rectangle , parallelogram , square , rhombus)</p>
4	<p>700.5 cm³ = mm³</p> <p>(7 005 , 700 500 , 1 000 , 75)</p>
5	<p>The four sides are equal in length in each and</p>
6	<p>if the ratio between the two dimensions of rectangle is 3 : 4 and its perimeter is 140 cm ,then its area =</p>
7	<p>if AC = BD in a parallelogram ABCD ,then this shape is called</p> <p>(rectangle , rhombus , square , rhombus)</p>
8	<p>2.5 feddans : 18 kirats =</p>
9	<p>in one of our schools ,there are 360 students ,if the ratio between the number of boys and the number of girls is 1 : 2 ,find each of the number of boys and girls</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>

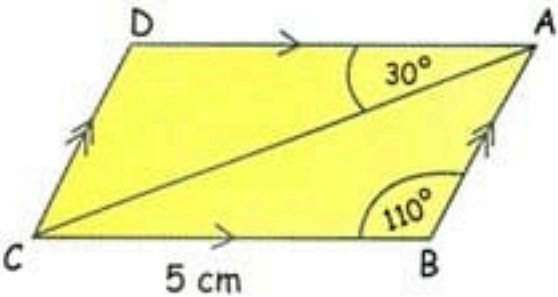
Exam (6)

1	The consequent of the ratio 3 : 11 is (3 , 5 , 11 , 2)
2	The side length of a square is 3 cm., then the ratio between its length and its perimeter = (4 , 3 , $\frac{1}{4}$, $\frac{1}{3}$)
3	if $\overline{AC} \perp \overline{BD}$ in a parallelogram ABCD , then this shape is called (rectangle , rhombus , square , rhombus)
4	The ratio between the side length of an equilateral triangle and its perimeter = (3 : 1 , 1 : 3 , 1 : 2 , 2 : 1)
5	The number of units which a solid consists of is called the of the solid
6	The rhombus whose one of its angles is right is called
7	300 grams : $1\frac{1}{2}$ kilogram =
8	The ratio between the measurements of angles in a triangle is 2 : 3 : 4 , then the measure of smallest angle is
9	If the ratio between the ages of Basma , Hanaa and Shereen is 2 : 3 : 5 and the difference between ages of Hanaa and Shereen is 4 year , find the ages of each of them

Exam (7)

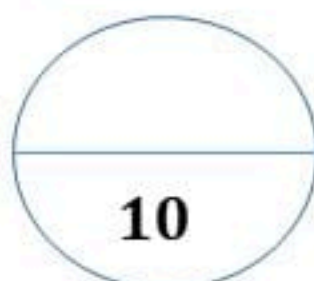
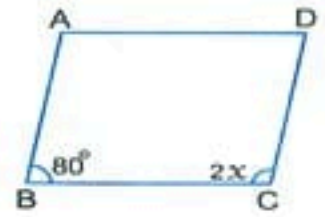
1	If the sum of two numbers is 105 and the ratio between them is 2 : 3 , then the greater one is (21 , 42 , 63 , 84)
2	The number of parallelograms in the opposite figure is (9 , 7 , 5 , 4) 
3	The volume of a cuboid is 400 cm^3 and its base is with length is 8 cm. and width is 5 cm., then its height = Cm. (50 , 80 , 10 , 20)
4	$\frac{1}{2} : \frac{1}{3} : \frac{1}{4} = \dots\dots\dots$ (2 : 3 : 4 , 4 : 3 : 2 , 6 : 4 : 3 , 3 : 4 : 2)
5	The two diagonals are perpendicular in each of and
6	The volume of a cuboid with a squared base of side length 5 cm. and its height is 4 cm is =
7	The sum of all dimensions of a cuboid is 48 cm. and the ratio among its dimensions is 5 : 4 : 3 , then its volume =
8	5 000 grams : 8 kilograms = (in the simplest form)
9	If the ratio between Hany's share : Samy's share : Tarek's share is 3 : 4 : 5 and the share of Hany was L.E 24 calculate the share of each of Samy and Tarek

Exam (8)


1	<p>If one angle of a parallelogram is right angle ,and has two adjacent sides are equal in length ,then it is called</p> <p>(rhombus , square , rectangle , trapezium)</p>
2	<p>The volume of a cuboid is 54 cm^3 ,its base is squared - shaped of side length 3 cm ,then its height = Cm. (42 , 6 , 8.5 , 7)</p>
3	<p>if $AB = BC$ in a parallelogram ABCD ,then this shape is called</p> <p>(rectangle , rhombus , square , rhombus)</p>
4	<p>if the ratio between the weight of Hani and the weight of Ahmed is $5 : 6$,if the weight of Ahmed is 60 kilograms ,then the weight of Hani = kilograms (25 , 50 , 60 , 30)</p>
5	<p>The volume of the cuboid with base area 160 cm^2 and height 10 cm. is</p>
6	<p>$2.5 : 5.75 = \dots\dots\dots$ (10 : 13 , 23 : 10 , 25 : 575 , 10 : 23)</p>
7	<p>In the parallelogram XYZL if $m(\angle Y) = 70^\circ$,then $m(\angle L) = \dots\dots\dots$</p>
8	<p>The ratio between 250 piasters , $7\frac{1}{2}$ pounds = :</p> <p>(in the simplest form)</p>
9	<p>The opposite figure shows a parallelogram in which: $m(\angle B) = 110^\circ$, $m(\angle DAC) = 30^\circ$ and $BC = 5 \text{ cm}$. Find: a) $m(\angle D)$. b) $m(\angle BAC)$. c) $m(\angle ACD)$.</p> 

Exam (9)

1	The antecedent of the ratio $\frac{3}{5}$ is (5 , 3 , 8 , 15)
2	Parallelogram with equal diagonals in length is called (trapezium , rectangle , rhombus , square)
3	ABCD is a parallelogram in which $m(\angle B) = 80^\circ$ and $m(\angle C) = 2x$, then the value of $x =$ (100 , 80 , 50 , 40)
4	$\frac{1}{8}$ day : 6 hours : $\frac{1}{2}$ day = (1 : 2 : 6 , 1 : 2 : 4 , 1 : 2 : 3 , 3 : 2 : 1)
5	$3250 \text{ mm}^3 = \dots\dots\dots \text{cm}^3$
6	A rectangle will be a square if its diagonals are
7	If the area of a rectangle is 32 cm^2 and its width is 4 cm , then the ratio between the length and the width =
8	The two diagonals are perpendicular in each and
9	if ratio between Hani and Maged weights is 5 : 6 and the difference between their weights is 10 kg Find the weight of each of them



Exam (10)

1	In the parallelogram ,the sum of measure of any two consecutive angles =° (45 , 90 , 180 , 360)
2	Decimeter is a unit for measuring (capacity , volume , length , weight)
3	If a is half b ,and b is twice C , then a : c = (1 : 1 , 1 : 2 , 1 : 4 , 2 : 1)
4	$2\text{ m}^3 = \dots\dots\dots\text{ dm}^3$ (2 , 20 , 200 , 2 000)
5	The following pattern  is
6	In parallelogram ,each two opposite angles are
7	$250\text{ m.} : \frac{1}{2}\text{ km.} = \dots\dots\dots$ (in simplest form)
8	A rhombus is a parallelogram in which two adjacent sides are
9	if the ratio between child age and his father age is 2 : 13 ,if the age of child is 6 years Find his father's age